

HCR94 / HR50

Testimony

HOUSE CONCURRENT RESOLUTION

URGING ALL STATE AGENCIES TO RETROFIT STREET LIGHTS AND OTHER
OUTDOOR LAMP LIGHTING FIXTURES WITH ENERGY EFFICIENT LIGHT-
EMITTING DIODE BULBS, WHERE APPROPRIATE.

1 WHEREAS, proper street lighting is critical for the safety
2 of pedestrians crossing streets and individuals operating motor
3 vehicles on the streets at night; and
4

5 WHEREAS, streetlights and other state outdoor lighting
6 fixtures that operate throughout the night consume large amounts
7 of electricity, the costs of which are ultimately paid for by
8 tax dollars; and
9

10 WHEREAS, energy efficient light-emitting diode bulbs
11 consume less watts to produce the same amount of light, produce
12 a whiter light, and last longer in the fixtures before needing
13 replacement compared to the current low-pressure sodium bulbs
14 used in many streetlights and other outdoor lighting fixtures;
15 and
16

17 WHEREAS, the recent H-1 Freeway Rehabilitation Project
18 replaced the aging low-pressure sodium yellow streetlight bulbs
19 with whiter light-emitting diode bulbs creating increased
20 illumination of the highway and saving the State electricity and
21 maintenance costs; now, therefore,
22

23 BE IT RESOLVED by the House of Representatives of the
24 Twenty-eighth Legislature of the State of Hawaii, Regular
25 Session of 2015, the Senate concurring, that all state agencies
26 are urged to retrofit outdoor lighting fixtures, including
27 street lights and outdoor athletic facilities, with energy
28 efficient light-emitting diode or better technology bulbs except
29 in locations where the installation of energy efficient bulbs
30 would not be permissible, including:

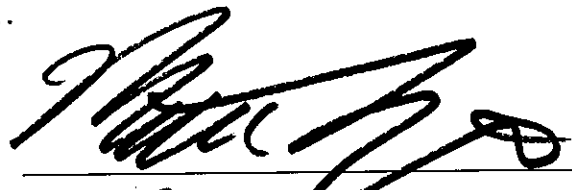
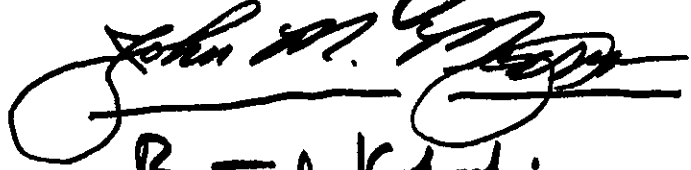




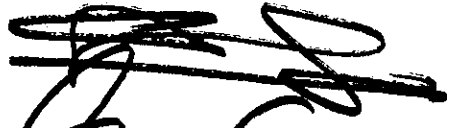



H.C.R. NO. 94

- (1) In state buildings where the retrofiting of light fixtures is not a responsibility of the State;
- (2) At locations near observatories on the island of Hawaii where the current light bulbs present the least interference with astronomy studies; and
- (3) Where county requirements currently provide more stringent lighting requirements; and

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Governor, the Comptroller, the Director of Transportation, and the President of the University of Hawaii System.

OFFERED BY:

MAR 11 2015



HOUSE RESOLUTION

URGING ALL STATE AGENCIES TO RETROFIT STREET LIGHTS AND OTHER
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- (2) At locations near observatories on the island of Hawaii where the current light bulbs present the least interference with astronomy studies; and
- (3) Where county requirements currently provide more stringent lighting requirements; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Governor, the Comptroller, the Director of Transportation, and the President of the University of Hawaii System.

OFFERED BY:

[Handwritten signatures]
John W. [unclear]
Brenda [unclear]
Nicole E. [unclear]
Richard [unclear]
[unclear]
[unclear]

MAR 11 2015





DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

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Statement of

LUIS P. SALAVERIA
Director

Department of Business, Economic Development & Tourism

before the

HOUSE COMMITTEE ON TRANSPORTATION

Wednesday, March 25, 2015

10:30 a.m.

State Capitol, Conference Room 309

in consideration of

HCR94 / HR50

**URGING ALL STATE AGENCIES TO RETROFIT STREET LIGHTS
AND OTHER OUTDOOR LAMP LIGHTING FIXTURES WITH ENERGY
EFFICIENT LIGHT-EMITTING DIODE BULBS, WHERE APPROPRIATE.**

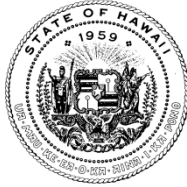
Chair Aquino, Vice Chair LoPresti, and Members of the Committee. DBEDT supports the intent of HCR94 and HR50, while noting that the Legislature passed Act 287 during the 2012 Session that established requirements for retrofitting existing state fixtures to help achieve many of the objectives outlined in these resolutions.

It should be noted that recent advances in LED lighting allow for significant energy savings while reducing the amount of blue light emitted by these fixtures. We also concur that care should be taken to ensure that these resolutions do not weaken any existing county ordinances that mandate full shielding of outdoor lighting.

In addition, our department convened a Starlight Reserve Committee in July of 2010 to study the impacts of nighttime light pollution statewide and provide recommendations for a Starlight Reserve Strategy that would address these issues. The chairman of this committee, Dr. Richard Wainscoat, has provided testimony commenting on HCR94 and HR50.

Thank you for the opportunity to testify on these resolutions.

DAVID Y. IGE
GOVERNOR



LATE

Testimony of
FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

March 25, 2015
10:30 a.m.
State Capitol, Room 309

HCR 94 / HR 50
URGING ALL STATE AGENCIES TO RETROFIT STREET LIGHTS AND OTHER
OUTDOOR LAMP LIGHTING FIXTURES WITH ENERGY EFFICIENT LIGHT-
EMITTING DIODE BULBS, WHERE APPROPRIATE

House Committee on Transportation

The Department of Transportation (DOT) **supports the intent** of these resolutions, which urges all state agencies to retrofit outdoor lighting fixtures, including street lights and outdoor athletic facilities, with energy efficient light-emitting diode (LED) or better technology bulbs except in locations where the installation of energy efficient bulbs would not be permissible.

The DOT is already engaged in efforts to look at energy saving strategies, one of which is the replacement of lighting fixtures at our facilities with LED and other energy saving technology. DOT has engaged a contractor that is looking at ways DOT can save energy. The scope of the consultants work includes the replacement of bulbs or fixtures that will minimize energy use.

Thank you for the opportunity to testify.

Testimony Related to
HCR94 and HR50
Presented before the
House Committee on Transportation
The Twenty-Eighth Legislature
March 25, 2015
by
Richard J. Wainscoat
Chair, Starlight Reserve Committee

Chair Aquino, Vice-Chair LoPresti and members of the Committee. My name is Richard Wainscoat and I am submitting this testimony in my capacity as Chair of the Starlight Reserve Committee.

The Starlight Reserve Committee is composed of representatives of the major stakeholders concerned with preservation of dark night skies in Hawaii. The committee has had extensive discussions related to outdoor lighting using Light Emitting Diodes.

I make the following comments:

1. Most importantly, the blue light from LEDs produces light pollution, limiting people's ability to see the night sky, and reducing the ability of telescopes to observe faint objects. Therefore, use of LEDs that have warmer colors (i.e., less blue) is important. Use of 2700K or 3000K LEDs reduces the amount of blue light, as does use of a filter, as is required on the island of Hawaii. This resolution should carefully balance energy savings and environmental harm.
2. This resolution does not mention existing state law that must be followed for state lighting. In particular, LEDs must have correlated color temperature of 4000K or less, and must be fully shielded. And the state must follow county lighting ordinances where the county ordinances are stricter.
3. The resolution should also mention astronomy activities on the island of Maui that also require careful protection from light pollution. The two Pan-STARRS telescopes, the Faulkes Telescope North, and a collection of Air Force telescopes are located on Haleakala and all require dark skies.
4. The island of Kauai has endangered birds that are affected by light at night. The effects of LEDs on these birds is unknown. Research by a UH graduate student suggested that these birds are least affected by warmer light (with less blue light).

5. Nesting turtles are affected by light at night. The impact on the turtles appears to be greatest for white light. Special care should be taken for lighting near beaches where turtles nest, including limiting the amount of blue light, and possibly only using amber light such as is required in Florida.
6. The resolution contains technical errors:
 - a. Light emitting diodes do not use less energy to produce the same amount of light. They produce approximately the same amount of light per Watt as T-8 fluorescent lamps and high-pressure sodium lamps, and less light per Watt than low-pressure sodium lamps. Instead, the light from LEDs is easier to direct, and there is less wasted light. So an area such as a roadway can be illuminated using LEDs more efficiently, using less total light, and that is where the energy savings is produced.
 - b. The H-1 freeway rehabilitation replaced high-pressure sodium lamps with LEDs.
 - c. Most current state roadway lighting is high-pressure sodium.

lopresti2 - George

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 24, 2015 12:12 AM
To: TRNtestimony
Cc: the-green-one@hawaii.rr.com
Subject: Submitted testimony for HCR94 on Mar 25, 2015 10:30AM

HCR94

Submitted on: 3/24/2015

Testimony for TRN on Mar 25, 2015 10:30AM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Natalie Iwasa	Individual	Comments Only	No

Comments: LEDs give off different colors of light. We need to be careful that the new lights are not too blue and too harsh. Warmer lighting, e.g., 2700K, should be used. Please do not post my email address.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

lopresti2 - George

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 23, 2015 3:27 PM
To: TRNtestimony
Cc: jamesjtz@aol.com
Subject: Submitted testimony for HR50 on Mar 25, 2015 10:30AM

HR50

Submitted on: 3/23/2015

Testimony for TRN on Mar 25, 2015 10:30AM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
James Gauer	Individual	Support	No

Comments: Decreasing the cost of living (taxes) while improving security and safety of community is in public interest.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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